

General

Guideline Title

Pembrolizumab for advanced melanoma not previously treated with ipilimumab.

Bibliographic Source(s)

National Institute for Health and Care Excellence (NICE). Pembrolizumab for advanced melanoma not previously treated with ipilimumab. London (UK): National Institute for Health and Care Excellence (NICE); 2015 Nov 25. 33 p. (Technology appraisal guidance; no. 366).

Guideline Status

This is the current release of the guideline.

This guideline meets NGC's 2013 (revised) inclusion criteria.

Recommendations

Major Recommendations

Pembrolizumab is recommended as an option for treating advanced (unresectable or metastatic) melanoma that has not been previously treated with ipilimumab, in adults, only when the company provides pembrolizumab with the discount agreed in the patient access scheme.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Advanced melanoma (unresectable or metastatic)

Guideline Category

Assessment of Therapeutic Effectiveness

Treatment

Clinical Specialty

Dermatology

Oncology

Intended Users

Advanced Practice Nurses

Nurses

Physician Assistants

Physicians

Guideline Objective(s)

To assess the clinical effectiveness and cost-effectiveness of pembrolizumab for advanced melanoma not previously treated with ipilimumab

Target Population

Adult patients with advanced (unresectable or metastatic) melanoma not previously treated with ipilimumab

Interventions and Practices Considered

Pembrolizumab

Major Outcomes Considered

- Clinical effectiveness
 - Progression-free survival (PFS)
 - Overall survival (OS)
 - Overall response rate (ORR)
 - Health-related quality of life (HRQoL)
 - Adverse events
- Cost-effectiveness

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Note from the National Guideline Clearinghouse (NGC): The National Institute for Health and Care Excellence (NICE) commissioned an independent academic centre to perform an assessment of the manufacturer's submission on the technology considered in this appraisal and prepare an Evidence Review Group (ERG) report. The ERG report for this technology appraisal was prepared by Liverpool Reviews & Implementation Group (LRiG) (see the "Availability of Companion Documents" field).

Clinical Effectiveness

Critique of the Methods of the Review

The company conducted a systematic review to identify randomised controlled trials (RCTs) that included pembrolizumab, in the treatment of patients with unresectable or metastatic melanoma, previously untreated with ipilimumab.

Searches

The search strategies used to identify studies relating to the use of pembrolizumab for the treatment of advanced melanoma are adequately described in the company submission (CS). These strategies were not specific to patients previously untreated with ipilimumab. The company conducted two systematic searches for clinical evidence: (1) a search for direct evidence and (2) a search for indirect evidence and adverse reactions. The ERG's summary and critique of the searches is reported in Appendix 1 of the ERG report. Full details of the strategies used by the company to identify clinical effectiveness evidence are reported in the CS. In summary, despite the absence of potentially important databases and limiting the language to English, the ERG considers that the searches were carried out to an adequate standard and accurately reflect the population and indication of interest. The ERG is confident that no relevant studies have been missed by the company's searches.

Eligibility Criteria

The ERG considers the company's eligibility criteria are relevant to the company's systematic review objectives.

The company used an appropriate methodology to identify relevant articles. This comprised two stages:

- Stage 1: The identified citations were independently assessed for inclusion through two stages, by two reviewers, using the criteria detailed in the table below. The reviewers independently scanned all potentially eligible abstracts and conference proceedings. Full-text articles were then obtained and the same two reviewers independently reviewed these. Disagreements about whether to include a study were resolved by reaching consensus with the help of a third reviewer.
- Stage 2: The reviewers independently scanned all potentially eligible abstracts and conference proceedings. Full-text articles were then obtained and the same two reviewers independently reviewed these. Disagreements about whether to include a study were resolved by reaching consensus with the help of a third reviewer.

Eligibility Criteria Used in the Company's Search Strategy

Clinical Effectiveness	Inclusion Criteria	Exclusion Criteria
Population	Patients with unresectable stage III or IV melanoma, naïve to treatment with ipilimumab	Patients with non-cutaneous melanoma (i.e., ocular or mucosal melanoma) and with unknown primary site
Intervention	Pembrolizumab/MK-3475	Any other intervention
Comparators	The following treatments as monotherapy or as combination therapy <ul style="list-style-type: none"> • Dacarbazine • Ipilimumab • Vemurafenib • Dabrafenib 	Any other comparison
Outcomes	At least one of the following outcomes: <ul style="list-style-type: none"> • Progression-free survival (PFS) • Overall survival (OS) • Overall response rate (OR) 	Other efficacy and safety outcomes to be considered for analysis, but each study must include at least one of: PFS, OS, OR.
Study design	Randomised controlled trials (RCTs)	Non-randomised clinical trials, prospective and retrospective observational studies, case studies

Language restrictions	Inclusion Criteria	Any other language	Exclusion Criteria
	Studies published in English language		

Results of the Company's Searches

The company's search for RCT evidence identified 16 non-duplicate records from electronic databases, 15 of these were selected for full-text screening. Of the identified articles, only one met the inclusion criteria for the systematic review. The company identified one other relevant trial from searches of www.clinicaltrials.gov [redacted], conference abstracts and the company's own records.

The company's search for non-RCT evidence identified one record from the electronic databases that were interrogated.

A further five trials met the inclusion criteria for the network meta-analyses (NMAs). The company's Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram, which shows how many articles were excluded at each step of the inclusion process, is presented in the CS.

See Appendix 1 of the ERG report for more information on the clinical effectiveness search strategy.

Cost-effectiveness

The Company's Review of Cost-effectiveness Evidence

Objective of Cost-effectiveness Review

The company undertook searches to identify studies reporting the cost effectiveness of comparator therapies to pembrolizumab for the treatment of patients with advanced melanoma. Details of the search strategies employed by the company are included in the CS. The databases and the initial time horizon for each search are summarised in Table 33 of the ERG report. In all cases the searches were updated in March 2015. The following databases were searched: Medline (via OVID SP), Medline In-process (via OVID SP), EMBASE, The Cochrane Library (including the National Health Service Economic Evaluation Database [NHS EED] and Health Technology Assessment [HTA] databases), and Econ-Lit.

Hand searches were also performed from the American Society of Clinical Oncology (ASCO), European Society for Medical Oncology (ESMO) and International Society for Pharmacoeconomics and Outcomes Research (ISPOR) conferences. These were constrained to the most recent 2 years (from July 2014) and updated searches were carried out in March 2015. In addition, the NICE Web site was searched to identify relevant information from previous submissions.

Eligibility Criteria Used in the Study Selection

The inclusion/exclusion criteria used to select studies are presented in the table below. The ERG is satisfied that these criteria are relevant to the decision problem.

Parameter	Inclusion Criteria	Exclusion Criteria
Population	Patients with advanced melanoma who are naïve to treatment with ipilimumab	None
Intervention	Any medical treatment of advanced melanoma, or best supportive care, no treatment or placebo	Non-pharmacological interventions
Outcomes	Studies including a comparison of costs between the intervention and comparator arms. Results should also include either incremental quality-adjusted life-years (QALYs, or another measure of health outcome/clinical effectiveness), or be structured with a cost minimisation argument.	Cost-only outcomes (without a cost-minimisation argument, e.g., burden of illness studies)
Study design	Full economic evaluations, comparing at least two interventions in terms of cost consequence, cost minimisation, cost effectiveness, cost utility or cost benefit	Reviews (systematic or otherwise), letters and comment articles
Publication type	Economic evaluations	Burden of illness studies
Language restrictions	Studies for which a full text version is available in English	Not available in English
Other	Studies must present sufficient detail of the methodology used and provide extractable results	Studies that fail to present sufficient methodological detail, such that the methods cannot be replicated or validated.

Parameter	Inclusion Criteria	Exclusion Criteria
		Studies that fail to present extractable results

Included and Excluded Studies

The company did not identify any relevant studies for inclusion in the review.

ERG Critique of the Company's Literature Review

The ERG is satisfied with the company's search strategy and stated inclusion/exclusion criteria and is confident that the company did not miss any relevant published papers.

Number of Source Documents

Clinical Effectiveness

- Two randomised controlled studies (RCTs) were included in the review.
- Five additional non-RCTs were also included for network meta-analysis (NMA).

Cost-effectiveness

- No relevant studies were identified for inclusion.
- The company submitted an economic model.

Methods Used to Assess the Quality and Strength of the Evidence

Expert Consensus

Rating Scheme for the Strength of the Evidence

Not applicable

Methods Used to Analyze the Evidence

Meta-Analysis

Review of Published Meta-Analyses

Systematic Review with Evidence Tables

Description of the Methods Used to Analyze the Evidence

Note from the National Guideline Clearinghouse (NGC): The National Institute for Health and Care Excellence (NICE) commissioned an independent academic centre to perform an assessment of the manufacturer's submission on the technology considered in this appraisal and prepare an Evidence Review Group (ERG) report. The ERG report for this technology appraisal was prepared by Liverpool Reviews & Implementation Group (LRiG) (see the "Availability of Companion Documents" field).

Clinical Effectiveness

Critique of Data Extraction

Relevant data were extracted by one reviewer and checked by a second reviewer. Any inconsistencies were resolved through discussion. The ERG considers this to be good standard practice.

Quality Assessment

A critical appraisal of the included studies was conducted by the company using assessment criteria based on the recommendations included in the

Evidence Synthesis

Since only the KEYNOTE-006 trial directly compared pembrolizumab with an appropriate comparator (ipilimumab), findings were appropriately presented in a narrative synthesis.

In the absence of direct evidence comparing pembrolizumab with three of the comparators specified in NICE's final scope, the company has conducted a series of network meta-analyses (NMAs).

ERG Critique of Direct Evidence of Clinical Effectiveness

ERG Assessment of Statistical Approach

A summary of the ERG's assessment of the statistical approach used to analyse data from the KEYNOTE-006 trial is presented in Table 8 of the ERG report.

Risk of Bias Assessment for KEYNOTE-006

The company conducted a risk of bias assessment for the KEYNOTE-006 trial using the criteria recommended in the NICE methods Guide (see Table 9 of the ERG report).

The ERG agrees with the company's assessment for the majority of criteria. However, the ERG considers that, as randomisation was conducted centrally using an interactive voice response system (IVRS), the concealment of treatment allocation was adequate. The use of the IVRS ensures that a patient's allocation to a particular treatment arm could not be predicted or influenced. The ERG also notes that an element of blinding was in place in the KEYNOTE-006 trial as the analyses of progression-free survival (PFS) and overall response rate (ORR) were based on blinded independent central review.

Critique of the Indirect Evidence

The ERG notes that the results of the company's NMAs that are described in the CS are not used in their base case cost effectiveness assessment. However, the results are used in scenario analyses only. Dacarbazine is included as a comparator in the NMAs. However, the company and the ERG do not consider dacarbazine as a relevant comparator to pembrolizumab.

Network Meta-analysis: Overview of Trials and Statistical Approach

Six RCTs were identified for inclusion in the company's NMAs. A summary of the key characteristics of the trials included in the NMAs is provided in Table 20 of the ERG report.

Networks of Evidence

The company conducted NMAs using four different scenarios. Each scenario consisted of a different network structure. Within each network structure, different efficacy assumptions were used to connect trials within the network; different combinations of trials were included in each of the four scenarios. A network diagram for each of the scenarios, and the different assumptions employed to form each network, are provided in Table 21 of the ERG report.

For two of the scenario networks, analyses could be performed for a wholly first-line patient population (scenarios 1 and 2 in Table 21 of the ERG report). For the other two scenario networks, both first- and second-line patients are included in the analyses (scenarios 3a and 3b in Table 21 of the ERG report).

Network Meta-analysis Methodology

NMAs were undertaken for each scenario to provide results for both PFS and overall survival (OS), with the exception that only OS results were generated for scenario 3a. The ERG considers that this exception may be due to the fact that the published paper describing the Hersh trial does not include PFS curves.

Each NMA was undertaken in the Bayesian framework. The company used OpenBUGS to implement the Markov Chain Monte Carlo (MCMC) method to provide estimates of the model parameters.

For the scenario networks that include first- and second-line patients (scenarios 3a and 3b) meta-regression analysis was used to adjust for differences in patient characteristics among first- and second-line patients.

See Section 4 of the ERG report for additional information on clinical effectiveness analysis.

Cost-effectiveness

Overview of Company's Economic Modelling

Description of Company's Economic Model

A schematic of the company's submitted economic model is provided in the CS and is reproduced in Figure 3 of the ERG report. The company's model compares pembrolizumab with ipilimumab, vemurafenib and dabrafenib. The company's cost effectiveness model is a partitioned survival model which comprises three mutually exclusive health states: pre-progression (i.e., progression-free survival [PFS]), post-progression survival (PPS) and death. All patients enter the model in the pre-progression state. At the beginning of each time period patients can either remain in the same health state or progress to a worse health state, i.e., patients in the pre-progression state can either move to the post-progression state or the death health state, whilst patients in the post-progression state can only move to the death health state.

The model uses the partitioned survival (also known as area under the curve or AUC) method to determine the proportion of patients in each of the three health states during each model cycle. The proportion of patients in PPS state is estimated as the difference between overall survival (OS) and PFS.

In the model, patients are assumed to receive pembrolizumab 2 mg/kg, vemurafenib or dabrafenib until progression or ipilimumab for four cycles. It should be noted that the trial protocol for KEYNOTE-006 included a 24-month stopping rule for pembrolizumab, which is not part of the company's base case but is considered as a scenario in the probabilistic sensitivity analysis. It is assumed that once patients progress they will be prescribed best supportive care (BSC). The pre-progression and post-progression health states were associated with specific treatment, resource utilisation and adverse event (AE) costs. Time-to-death sub-states were used to capture patients' quality of life as a function of length of time until death <1 month, 1-3 months, 3-6 months, 6-9 months, 9-12 months and >12 months to death.

The model has been developed in MS Excel and employs a cycle length of 1 week (no half-cycle correction). The time horizon is 30 years and health effects are measured in quality-adjusted life-years (QALYs). The perspective is that of the National Health Service (NHS) and cost and outcomes are discounted at an annual rate of 3.5%.

See Sections 5 and 6 of the ERG report for additional information about cost-effectiveness analysis.

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Considerations

Technology appraisal recommendations are based on a review of clinical and economic evidence.

Technology Appraisal Process

The National Institute for Health and Care Excellence (NICE) invites 'consultee' and 'commentator' organisations to take part in the appraisal process. Consultee organisations include national groups representing patients and carers, the bodies representing health professionals, and the manufacturers of the technology under review. Consultees are invited to submit evidence during the appraisal and to comment on the appraisal documents.

Commentator organisations include manufacturers of the products with which the technology is being compared, the National Health Service (NHS) Quality Improvement Scotland and research groups working in the area. They can comment on the evidence and other documents but are not asked to submit evidence themselves.

NICE then commissions an independent academic centre to review published evidence on the technology and prepare an 'assessment report'. Consultees and commentators are invited to comment on the report. The assessment report and the comments on it are then drawn together in a document called the evaluation report.

An independent Appraisal Committee then considers the evaluation report. It holds a meeting where it hears direct, spoken evidence from

nominated clinical experts, patients and carers. The Committee uses all the evidence to make its first recommendations, in a document called the Appraisal Consultation Document (ACD). NICE sends all the consultees and commentators a copy of this document and posts it on the NICE Web site. Further comments are invited from everyone taking part.

When the Committee meets again it considers any comments submitted on the ACD; then it prepares its final recommendations in a document called the Final Appraisal Determination (FAD). This is submitted to NICE for approval.

Consultees have a chance to appeal against the final recommendations in the FAD. If there are no appeals, the final recommendations become the basis of the guidance that NICE issues.

Who Is on the Appraisal Committee?

NICE technology appraisal recommendations are prepared by an independent committee. This includes health professionals working in the NHS and people who are familiar with the issues affecting patients and carers. Although the Appraisal Committee seeks the views of organisations representing health professionals, patients, carers, manufacturers and government, its advice is independent of any vested interests.

Rating Scheme for the Strength of the Recommendations

Not applicable

Cost Analysis

Summary of Appraisal Committee's Key Conclusions

Availability and Nature of Evidence

The Committee considered the company's model, which compared pembrolizumab with ipilimumab, vemurafenib and dabrafenib, in people with advanced (unresectable or metastatic) melanoma that had not been previously treated with ipilimumab.

Uncertainties Around and Plausibility of Assumptions and Inputs in the Economic Model

The Committee considered that the Evidence Review Group (ERG) had identified a number of important uncertainties in the economic modelling, and it expressed concerns about some of the company's assumptions:

- Extrapolated survival benefit
- Clinical effectiveness of pembrolizumab compared with dabrafenib and vemurafenib
- Costs associated with adverse events

Incorporation of Health-related Quality-of-Life Benefits and Utility Values. Have Any Potential Significant and Substantial Health-related Benefits Been Identified That Were Not Included in the Economic Model, and How Have They Been Considered?

Utility values were estimated using EuroQol (EQ)-5D data from KEYNOTE 006, by assuming that quality of life decreases as people approach the last months of life. The utility scores decreased from 0.82, for people who were more than 360 days before death, to 0.33 for people in the 30 days before death.

The ERG considered that there were important limitations in the estimation of utility, because of the use of EQ-5D data based on patients from all regions and the assumption that utility did not change when disease progressed.

The Committee could not identify any specific health-related benefits that had not been captured in the calculation of quality-adjusted life-years (QALYs).

Are There Specific Groups of People for Whom the Technology Is Particularly Cost Effective?

No subgroups were considered.

What Are the Key Drivers of Cost-effectiveness?

In a deterministic sensitivity analysis, the model results were most sensitive to the extrapolation of progression-free survival for pembrolizumab. The company also presented 33 scenario analyses, and stated that the cost effectiveness was robust to most sources of uncertainty.

The ERG considered that the key factors affecting results of the model were drug costs, duration of treatment and overall survival.

Most Likely Cost-effectiveness Estimate (Given as an Incremental Cost-effectiveness Ratio [ICER])

The Committee concluded that the most plausible ICERs for pembrolizumab (compared with ipilimumab, dabrafenib and vemurafenib) were less than £50,000 per QALY gained. The exact ICERs are confidential and cannot be reported here.

Method of Guideline Validation

External Peer Review

Description of Method of Guideline Validation

Consultee organisations from the following groups were invited to comment on the draft scope, Assessment Report and the Appraisal Consultation Document (ACD) and were provided with the opportunity to appeal against the Final Appraisal Determination (FAD).

- Manufacturer/sponsors
- Professional/specialist and patient/carer groups
- Commentator organisations (without the right of appeal)

In addition, individuals selected from clinical expert and patient advocate nominations from the professional/specialist and patient/carer groups were also invited to comment on the ACD.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of evidence supporting the recommendations is not specifically stated.

The Appraisal Committee considered clinical and cost-effectiveness evidence submitted by the manufacturer and a review of this submission by the Evidence Review Group (ERG). The main clinical effectiveness evidence came from two randomised controlled trials (RCTs). For cost-effectiveness, the Appraisal Committee considered an economic model submitted by the manufacturer.

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Appropriate use of pembrolizumab for advanced melanoma not previously treated with ipilimumab

Potential Harms

The most common (occurring in 1 in 10 people or more) adverse reactions with pembrolizumab in clinical trials were diarrhoea, nausea, itching, rash, joint pain and fatigue. The most serious adverse reactions were immune-related adverse reactions and severe infusion-related reactions.

For full details of adverse reactions and contraindications, see the summary of product characteristics.

Contraindications

Contraindications

For full details of adverse reactions and contraindications, see the summary of product characteristics.

Qualifying Statements

Qualifying Statements

- This guidance represents the views of the National Institute for Health and Care Excellence (NICE) and was arrived at after careful consideration of the evidence available. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. However, the guidance does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.
- Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this guidance should be interpreted in a way that would be inconsistent with compliance with those duties.

Implementation of the Guideline

Description of Implementation Strategy

Section 7(6) of the [National Institute for Health and Care Excellence \(NICE\) \(Constitution and Functions\) and the Health and Social Care Information Centre \(Functions\) Regulations 2013](#) requires clinical commissioning groups, National Health Service (NHS) England and, with respect to their public health functions, local authorities to comply with the recommendations in this appraisal within 3 months of its date of publication.

The Welsh Assembly Minister for Health and Social Services has issued directions to the NHS in Wales on implementing NICE technology appraisal guidance. When a NICE technology appraisal recommends the use of a drug or treatment, or other technology, the NHS in Wales must usually provide funding and resources for it within 3 months of the guidance being published.

When NICE recommends a treatment 'as an option', the NHS must make sure it is available within the period set out in the paragraphs above. This means that, if a patient has advanced (unresectable or metastatic) melanoma that has not been previously treated with ipilimumab and the doctor responsible for their care thinks that pembrolizumab is the right treatment, it should be available for use, in line with NICE's recommendations.

The Department of Health and Merck Sharp & Dohme have agreed that pembrolizumab will be available to the NHS with a patient access scheme which makes it available with a discount. The size of the discount is commercial in confidence. It is the responsibility of the company to communicate details of the discount to the relevant NHS organisations. Any enquiries from NHS organisations about the patient access scheme should be directed to Keiron Hughes (keiron.hughes@merck.com).

NICE has developed a [costing template and report](#) to estimate the national and local savings and costs associated with implementation (see also the "Availability of Companion Documents" field).

Implementation Tools

Mobile Device Resources

Patient Resources

Resources

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

End of Life Care

Living with Illness

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

National Institute for Health and Care Excellence (NICE). Pembrolizumab for advanced melanoma not previously treated with ipilimumab. London (UK): National Institute for Health and Care Excellence (NICE); 2015 Nov 25. 33 p. (Technology appraisal guidance; no. 366).

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2015 Nov 25

Guideline Developer(s)

National Institute for Health and Care Excellence (NICE) - National Government Agency [Non-U.S.]

Source(s) of Funding

National Institute for Health and Care Excellence (NICE)

Guideline Committee

Appraisal Committee

Composition of Group That Authored the Guideline

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Financial Disclosures/Conflicts of Interest

Committee members are asked to declare any interests in the technology to be appraised. If it is considered there is a conflict of interest, the member is excluded from participating further in that appraisal.

Guideline Status

This is the current release of the guideline.

This guideline meets NGC's 2013 (revised) inclusion criteria.

Guideline Availability

Available from the [National Institute for Health and Clinical Excellence \(NICE\) Web site](#) . Also available for download in ePub or eBook formats from the [NICE Web site](#) .

Availability of Companion Documents

The following are available:

- Pembrolizumab for advanced melanoma not previously treated with ipilimumab. Costing statement. London (UK): National Institute for Health and Care Excellence (NICE); 2015 Nov 25. 6 p. (Technology appraisal guidance; no. 366). Available from the [National Institute for Health and Care Excellence \(NICE\) Web site](#) .
- Pembrolizumab for advanced melanoma not previously treated with ipilimumab. Costing template. London (UK): National Institute for Health and Care Excellence (NICE); 2015 Nov 26. (Technology appraisal guidance; no. 366). Available from the [NICE Web site](#) .
- Greenhalgh J, Mahon J, Richardson M, Krishan A, Aslam RW, Beale S, Boland A, Stainthorpe A, Bagust A, Kotas E, Banks L, Payne E. Pembrolizumab for treating advanced melanoma previously untreated with ipilimumab: a single technology appraisal. Liverpool (UK): Liverpool Reviews and Implementation Group (LRiG), University of Liverpool; 2015 Jul. Available from the [NICE Web site](#) .
- Pembrolizumab for treating advanced melanoma in people previously untreated with ipilimumab [ID801]. Manufacturer's submission. Merck Sharp & Dohme; 2015 May. Available from the [NICE Web site](#) .

Patient Resources

The following is available:

- Pembrolizumab for advanced melanoma not previously treated with ipilimumab. Information for the public. London (UK): National Institute for Health and Care Excellence (NICE); 2015 Nov 25. 3 p. (Technology appraisal guidance; no. 366). Available from the [National Institute for Health and Care Excellence \(NICE\) Web site](#) . Also available for download in ePub and eBook formats from the [NICE Web site](#) .

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

NGC Status

This NGC summary was completed by ECRI Institute on February 23, 2016.

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